APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/653,227	08/31/2000	Bernard A. Traversat	5181-64800	4782

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ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 December 2002*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-72* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 August 2000* is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *7*.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-72 have been examined.

2.   Please provide explanation to why the references submitted along with IDS are relevant

to the current application in order to be considered.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this
>
> or a foreign country, before the invention thereof by the applicant for a patent.

4.   Claims 1-15, 17-22, 24-37, 41-55, and 57-72 are rejected under 35 U.S.C. 102(a) as being

clearly anticipated by Czerwinski et al. "An Architecture for a Secure Service Discovery

Service" (hereinafter Czerwinski).

5.   As per claim 1, 27, 43, 51, and 62, Czerwinski discloses a method for communicating in

a distributed computing environment, comprising: a client accessing an authentication service to

obtain an authentication credential to use a first service (Czerwinski: page 26 section 3.1 and

page 27 section 3.3 and page 28 section 3.4); said client sending a first message to said first

service, wherein said first message includes said authentication credential (Czerwinski: page 26

section 3.1 and page 27 section 3.3 and page 28 section 3.4); said first service using said

authentication service to authenticate said authentication credential received in said first message

(Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); and said first

service responding to said first message if said authentication credential in said first message is

determined to be authentic as from said client (Czerwinski: page 26 section 3.1 and page 27

section 3.3 and page 28 section 3.4).

6.   As per claim 2 and 28, Czerwinski discloses the method as recited in claims 1 and 27

respectively. Czerwinski further discloses the method comprising said client obtaining an address

for said authentication service from an advertisement for said first service (Czerwinski: page 26

section 3.1 and page 27 section 3.3 and page 28 section 3.4), wherein said accessing an

authentication service comprises said client sending a message to said address for said

authentication service requesting said authentication credential to use said advertised first

service. (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4).

7.   As per claim 3 and 44, Czerwinski discloses the method as recited in claims 2 and 43

respectively. Czerwinski further discloses wherein said advertisement for said first service

includes a data representation language schema defining a message interface for accessing said

first service (Czerwinski: page 27 section 3.1: a client submits a query in the form of an XML

template).

8.   As per claim 4 and 45, Czerwinski discloses the method as recited in claims 3 and 44

respectively. Czerwinski further discloses wherein said first message corresponds to a message

defined in said data representation language schema (Czerwinski: page 27 section 3.1: a client

submits a query in the form of an XML template).

9.   As per claims 5, 30, 46, and 54, Czerwinski discloses the method as recited in claims 4,

29, 45, and 53

10.   . respectively. Czerwinski further discloses the method comprising said client sending

additional messages to said first service to use said first service, wherein said authentication

credential is included with each one of said additional messages, and wherein each one of said

additional messages is defined by said data representation language schema (Czerwinski: page

27 section 3.1: a client uses Authenticated RMI).

11.   As per claim 6, 31, 47, 55, and 65, Czerwinski discloses the method as recited in claims

5, 29, 44, 53, and 64 respectively. Czerwinski further discloses wherein said data representation

language schema is an eXtensible Markup Language (XML) schema (Czerwinski: page 27

section 3.1: a client uses Authenticated RMI).

12.   As per claim 7, 32 and 48, Czerwinski discloses the method as recited in claims 1, 27,

and 43 respectively. Czerwinski further discloses the method comprising: determining client

capabilities for said client, wherein said client capabilities are capabilities of said first service

that said client is permitted to use (Czerwinski: page 28 section 3.4); and binding said client

capabilities to said authentication token (Czerwinski: page 28 section 3.4).

13.   As per claim 8, 33, and 49, Czerwinski discloses the method as recited in claims 7, 32, and 43 respectively. Czerwinski further discloses the method comprising: said client sending a request message to said first service to access a capability of said first service wherein said request includes said authentication credential (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); said first service determining that the capability requested in said request message is within said client capabilities (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); and said first service fulfilling said request message only if the capability requested in said request message is within said client capabilities (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4).

14.   As per claim 9 and 34, Czerwinski discloses the method as recited in claims 7 and 32 respectively. Czerwinski further discloses wherein said determining client capabilities comprises said client accessing an access policy service to obtain a capability token indicating which capabilities of said first service said client is permitted to access (Czerwinski: page 28 section 3.4).

15.   As per claim 10 and 35, Czerwinski discloses the method as recited in claims 9 and 34 respectively. Czerwinski further discloses wherein said authentication service and said access policy service are combined as a single service and wherein said capability token is included within said authentication credential (Czerwinski: page 28 section 3.4).

16.   As per claim 11, Czerwinski discloses the method as recited in claim 7. Czerwinski

further discloses wherein said determining client capabilities is performed by said first

service(Czerwinski: page 28 section 3.4).

17.   As per claim 12 and 36, Czerwinski discloses the method as recited in claims 1 and 27

respectively. Czerwinski further discloses the method comprising said client generating a

message gate for accessing said first service (Czerwinski: page 26 section 3.1 and page 27

section 3.3 and page 28 section 3.4), wherein said message gate sends request messages from

said client to said first service to access said first service (Czerwinski: page 26 section 3.1 and

page 27 section 3.3 and page 28 section 3.4), and wherein said message gate includes said

authentication credential in each message to said first service (Czerwinski: page 26 section 3.1

and page 27 section 3.3 and page 28 section 3.4).

18.   As per claim 13, Czerwinski discloses the method as recited in claim 12. Czerwinski

further discloses the method comprising said client obtaining a service advertisement for said

first service before accessing said first service (Czerwinski: page 26 section 3.1 and page 27

section 3.3 and page 28 section 3.4), wherein said service advertisement comprises an address

for said authentication service and an address for said first service (Czerwinski: page 26 section

3.1 and page 27 section 3.3 and page 28 section 3.4).

19.   As per claim 14, 53, and 64, Czerwinski discloses the method as recited in claims 13, 52,

and 63 respectively. Czerwinski further discloses wherein said service advertisement further

comprises a data representation language schema defining a message interface for accessing said

first service (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4),

wherein said message gate verifies that each message sent from said client to said first service

complies with said data representation language schema (Czerwinski: page 26 section 3.1, page

27 section 3.3, page 28 section 3.4, page 25 sections 2.2-2.3).

20.   As per claim 15, Czerwinski discloses the method as recited in claim 1. Czerwinski

further discloses wherein said authentication service is a separately addressable service from said

first service (Czerwinski: page 26 section 3.1, page 27 sections 3.3, page 28 section 3.4, and page

32 section 6.1).

21.   As per claim 17, 58, and 69, Czerwinski discloses a method for communication in a

distributed computing environment, comprising: a client obtaining a service advertisement for a

first service (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4),

wherein said service advertisement includes an address for an authentication service

(Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); said client

sending a request message to said authentication service to obtain an authentication credential to

use said first service (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28

section 3.4); said client generating a message gate for accessing said first service (Czerwinski:

page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4), wherein said message gate

embeds said authentication credential in every message from said client to said first service

(Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); and said

client accessing said first service through said message gate (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4).

22.   As per claim 18, 29, 37, and 59, Czerwinski discloses the method as recited in claims 17, 28, 36, and 58 respectively. Czerwinski further discloses wherein said service advertisement further comprises a data representation language schema defining a message interface for accessing said first service (Czerwinski: page 27 section 3.1: a client uses Authenticated RMI), the method further comprising said message gate verifying that every message sent from said client to said first service complies with said data representation language schema (Czerwinski: page 27 section 3.1: a client uses Authenticated RMI).

23.   As per claim 19 and 60, Czerwinski discloses the method as recited in claims 18 and 59 respectively. Czerwinski further discloses wherein said data representation language schema is an eXtensible Markup Language (XML) schema and said messages from said client to said first service are XML messages (Czerwinski: page 27 section 3.1: submit XML query).

24.   As per claim 20, Czerwinski discloses the method as recited in claim 17. Czerwinski further discloses the method comprising said first service using said authentication service to determine if said authentication credential received in a first message from said client is authentic (Czerwinski: page 28 section 3.4).

25.   As per claim 21 and 61, Czerwinski discloses the method as recited in claims 20 and 58

respectively. Czerwinski further discloses the method comprising, after authenticating said

authentication credential received in said first message from said client, said first service

determining which capabilities of said first service said client is authorized to use (Czerwinski:

page 28 section 3.4), wherein said first service responds to a request message from said client

only if said request message is for an authorized capability for said client (Czerwinski: page 28

section 3.4).

26.   As per claim 24, Czerwinski discloses the method as recited in claim 17. Czerwinski

further discloses wherein said service advertisement for said first service further includes an

address for accessing said first service, wherein said authentication service and said first service

are separate services within the distributed computing environment (Czerwinski: page 28 section

3.1).

27.   As per claim 25, Czerwinski discloses the method as recited in claim 17. Czerwinski

further discloses wherein said service advertisement further includes a service identifier token for

said first service, wherein said client sending a request message to said authentication service to

obtain an authentication credential comprises sending said service identifier token and a client

identifier token to said authentication service (Czerwinski: page 28 section 3.4: binding the

principal name and the service name and signed by some well known authority).

28.   As per claim 26, Czerwinski discloses the method as recited in claim 25. Czerwinski

further discloses wherein said authentication service generates said authentication credential

from said client identifier token and said service identifier token (Czerwinski: page 28 section

3.4: binding the principal name and the service name and signed by some well known authority).

29.   As per claim 41 and 57, Czerwinski discloses the client device as recited in claims 27 and

51 respectively. Czerwinski further discloses wherein said authentication service is configured to

execute within an authentication server (Czerwinski: page 26 section 3.1 and page 27 section 3.3

and page 28 section 3.4); wherein said first service is configured to execute within a service

device (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); and

wherein said client device, said service device, and said authentication server are separate

devices comprised in a distributed computing environment (Czerwinski: page 26 section 3.1 and

page 27 section 3.3 and page 28 section 3.4).

30.   As per claim 42, Czerwinski discloses the client device as recited in claim 27. Czerwinski

further discloses wherein said first service is configured to execute within said client device

(Czerwinski: page 27 section 3.1: remote method invocation).

31.   As per claim 50, Czerwinski discloses the service device as recited in claim 43.

Czerwinski further discloses wherein said client is configured to execute within a client device,

and wherein said service device and said client device are separate devices comprised in a

distributed computing environment (Czerwinski: page 36 section 3.1).

32.   As per claim 52 and 63, Czerwinski discloses the system as recited in claims 51 and 62

respectively. Czerwinski further discloses wherein the service device is further configured to

provide to said client device an advertisement for said service device (Czerwinski: page 26

section 3.1 and page 25 section 2.3), wherein said advertisement includes a data representation

language schema defining a message interface for accessing said service device (Czerwinski:

page 26 section 3.1 and page 25 section 2.3); wherein the client device is further configured to

obtain an address for said authentication service from said advertisement for said service device

(Czerwinski: page 26 section 3.1 and page 25 section 2.3); and wherein, in said accessing an

authentication service, the client device is further configured to send a message to said address

for said authentication service requesting said authentication credential to use said advertised

service device (Czerwinski: page 26 section 3.1, page 25 section 2.3, and page 27 section 3.3).

33.   As per claim 66, Czerwinski discloses the carrier medium as recited in claim 62.

Czerwinski further discloses wherein the program instructions are further computer-executable to

implement: determining client capabilities for said client, wherein said client capabilities are

capabilities of said first service that said client is permitted to use (Czerwinski: page 28 section

3.4); and binding said client capabilities to said authentication token (Czerwinski: page 28

section 3.4); said client sending a request message to said first service to access a capability of

said first service (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section

3.4), wherein said request message includes said authentication credential (Czerwinski: page 26

section 3.1 and page 27 section 3.3 and page 28 section 3.4); said first service determining that

the capability requested in said request message is within said client capabilities (Czerwinski:

page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); and said first service

fulfilling said request message only if the capability requested in said request message is within

said client capabilities (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28

section 3.4).

34. As per claim 67, Czerwinski discloses the carrier medium as recited in claim 62.

Czerwinski further discloses wherein the program instructions are further computer-executable to

implement: said client generating a message gate for accessing said first service (Czerwinski:

page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); said message gate sending

request messages from said client to said first service to an access said first service, wherein said

message gate includes said authentication credential in each message to said first service

(Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4).

35. As per claim 68, Czerwinski discloses the carrier medium as recited in claim 67.

Czerwinski further discloses wherein the program instructions are further computer-executable to

implement: said message gate verifying that each message sent from said client to said first

service complies with a data representation language schema (Czerwinski: page 26 section 3.1

and page 27 section 3.3 and page 28 section 3.4), wherein said data representation language

schema defines a message interface for accessing said first service (Czerwinski: page 26 section

3.1 and page 27 section 3.3 and page 28 section 3.4).

36.   As per claim 70, Czerwinski discloses the carrier medium as recited in claim 69. Czerwinski further discloses wherein said service advertisement further comprises a data representation language schema defining a message interface for accessing said first service, and wherein the program instructions are further computer-executable to implement: said message gate verifying that every message sent from said client to said first service complies with said data representation language schema (Czerwinski: page 27 section 3.1).

37.   As per claim 71, Czerwinski discloses the carrier medium as recited in claim 70. Czerwinski further discloses wherein said data representation language schema is an eXtensible Markup Language (XML) schema and said messages from said client to said first service are XML messages (Czerwinski: page 27 section 3.1 and page 25 section 2.3).

38.   As per claim 72, Czerwinski discloses the carrier medium as recited in claim 69. Czerwinski further discloses wherein the program instructions are further computer-executable to implement: said first service using said authentication service to determine if said authentication credential received in a first message from said client is authentic (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); said first service determining which capabilities of said first service said client is authorized to use (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4); and said first service responding to said first message from said client only if said first message is for an authorized capability for said client (Czerwinski: page 26 section 3.1 and page 27 section 3.3 and page 28 section 3.4).

Claim Rejections - 35 USC § 103

39.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

40.   Claims 16, 23, 38, 39, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Czerwinski in view of Johnson et al. U.S. Pat. No. 5560008 (hereinafter Johnson).

41.   As per claim 16 and 38, Czerwinski discloses the method as recited in claims 1 and 27

respectively. Czerwinski does not explicitly discloses wherein said client accessing an

authentication service to obtain an authentication credential to use a first service comprises said

authentication service returning said authentication credential to said client only if said client is

authorized to access said first service. However, Johnson discloses a server creates authentication

credential for client based on the security facts of clients and server authenticates client based on

capabilities (Johnson: column 5 lines 30-65). It would have been obvious to one having ordinary

skill in the art at the time of applicant's invention to combine the teachings of Johnson within the

system of Czerwinski because establishing client's authentication credential by authentication

serves to eliminate the need for authentication repeatedly thus increases efficiency of

communication.

42.   As per claim 22 and 23, Czerwinski discloses the method as recited in claims 21 and 20

respectively. Czerwinski does not explicitly disclose the method further comprising said first

service noting whether or not said authentication credential is authentic so that said first service

does not need to repeat said using said authentication service to determine if said authentication

credential received in a first message from said client is authentic. However, Johnson discloses

that limitation (Johnson: column 5 lines 30-65). Same rationale applies here as above in rejecting

claim 16.

43.   As per claim 39 and 56, Czerwinski discloses the client device as recited in claims 27 and

51 respectively. Czerwinski does not explicitly disclose wherein said authentication service and

said first service are configured to execute within a service device, and wherein said client device

is further configured to couple to said service device via a network. However, Johnson discloses

these limitations (Johnson: column 5 lines 30-65). It would have been obvious to one having

ordinary skill in the art at the time of applicant's invention to combine the teachings of Johnson

within the system of Czerwinski because it is well known in the art for a server to provide

authentication and service together.

44.   Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Czerwinski in

view of Applicant's Applied Prior Art (hereinafter AAPA).

45.   As per claim 40, Czerwinski discloses the client device as recited in claim 27.

Czerwinski does not explicitly disclose wherein said client device is further configured to couple

to a network via a wireless connection. However, AAPA discloses that limitation (AAPA:

related prior art: interconnecting devices from pda, cell phones, laptop computer, etc.). It would

have been obvious to one having ordinary skill in the art to combine the teachings of AAPA

within the system of Czerwinski because it is well known in the art to use wireless network to

connect various types of electronic devices.

Conclusion

46.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Vacon et al. U.S. Pat. No. 5227778 discloses network node queries server to find services

on the network and return the service provider address if result is found (Vacon: column 1 line

57 – column 2 line 56).

Koodli U.S. Pat. No. 6571095 discloses system and method for providing address

discovery of services in mobile networks.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Shin-Hon Chen whose telephone number is (703) 305-8654. The

examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (703) 305-9648. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shin-Hon Chen
Examiner
Art Unit 2131

SC

EMMANUEL L. MOISE
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2136